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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/713,124	11/14/2003	Masahiko Yamamoto	600791-9US (ZUS-032TAE)	9581
570 7590 05/01/2007 AKIN GUMP STRAUSS HAUER & FELD L.L.P. ONE COMMERCE SQUARE 2005 MARKET STREET, SUITE 2200 PHILADELPHIA, PA 19103			EXAMINER MCGRAW, TREVOR EDWIN	
			ART UNIT 3752	PAPER NUMBER
			MAIL DATE 05/01/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/713,124	Applicant(s) YAMAMOTO ET AL.	
	Examiner Trevor McGraw	Art Unit 3752	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 December 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 11,12 and 17-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 11,12 and 17-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 14 November 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☒ Certified copies of the priority documents have been received in Application No. JP 2002-356488.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Objection to Drawings

Examiner withdraws objection to drawings held under 37 CFR 1.84 (p)(5) in view of Applicant's amendment to the specification that adds reference character "31" following "outer edge" recitations in paragraphs 24 and 26.

Rejection under 35 USC § 112

The rejection of Claims 2 and 3 held under 35 USC § 112 Second Paragraph has been withdrawn in view of Applicant's amendment as Applicant has cancelled Claims 2 and 3 previously rejected under 35 USC § 112 Second Paragraph in Office Action mailed 09/07/2006.

Rejection under 35 USC § 102

The rejection of Claims 1 and 4 held under 35 USC § 102 (b) has been withdrawn in view of Applicant's amendment as Applicant has cancelled Claims 1 and 4 previously rejected under 35 USC § 102 (b) in Office Action mailed 09/07/2006.

Rejection under 35 USC § 103

The rejection of Claims 1-10 and 13-16 held under 35 USC § 103 (a) has been withdrawn in view of Applicant's amendment as Applicant has cancelled Claims 1-10

and 13-16 previously rejected under 35 USC § 103 (a) in Office Action mailed 09/07/2006.

Allowable Subject Matter

The indicated allowability of claims 11, 12 and 17-20 is withdrawn in view of the newly discovered reference(s) to Gfoll (US 2,903,888). Rejections based on the newly cited reference(s) follow.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 11 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mullins (US 3,336,936) in view of Fluck et al. (US PG PUB 2004/0036232).

In regard to Claim 11, Mullins teaches a threaded nozzle cap that engages with a distal end of a nozzle having a tapered face (24; Figure 1) on a distal end through which a compressed fluid is capable of passing where the nozzle cap (50) has a terminal wall (see Figure 1; 50 has terminal wall engaging with seal 52) that is opposed to a distal end face of the nozzle (10) axially with respect to the nozzle (10; Figure 1) where a sealing member (52) is placed on the terminal wall of the cap (50) and adheres closely to the distal end of the nozzle sealing the nozzle opening (see Figure 2 with cap 50

removed; opening is shown surrounding "22") and a holding wall of the cap (50) presses and holds an edge of the sealing member (52) and cooperates with the terminal wall (See Figure 1 where 52 meets with 50 laterally and longitudinally) where the holding wall of the cap (50) is disposed such that the distal end face of the nozzle (10) abuts against the holding wall.

However, Mullins is silent and fails to teach where a nozzle cap having a holding wall that has a protruding wall from a terminal wall and is bent to a sealing member side and where a protruding wall is formed into a cylindrical shape and surrounds the sealing member where the protruding wall is provided with an engagement protrusion that bites into the sealing member and where an adherent protrusion of the sealing member protrudes toward the tapered face of the nozzle.

On the other hand, Fluck et al. (US PG PUB 2004/0036232) teaches a sealing system with a sealing member that is disposed within a holding wall (22) has an extending cylindrical protruding wall (23) from the terminal wall (16) and is bent to the sealing member (27) (Paragraph 10, lines 1-29; emphasis on lines 11-17 that show that "23" is arranged around the circumference of the wall "16" which inherently shows that the protrusion wall "23" is cylindrical) where the terminal wall (16) is provided with an engagement protrusion (25) that bites into the sealing member (27). Fluck et al. further teaches where the sealing member has an adherent protrusion (rounded end of 27) that has a flat portion located inside the adherent protrusion where the holding wall (22) and terminal wall (16) hold the flat portion of the sealing member (27) therebetween (Figure 1).

Therefore, it would have been obvious to one with ordinary skill in that art at the time of the present invention to change the seal and wall arrangement of Mullins with the sealing and wall arrangement of Fluck et al. to provide for a firm sealing engagement with the tapered face of Mullins to prevent any leakage or foreign debris from entering the service valve nozzle for when the nozzle is not in use and to provide for a seal that will not adhere to the body of the nozzle cap where a tension and compression seal is created between the nozzle cap and nozzle. It is further obvious to one having ordinary skill in the art to position the adherent protrusion of the sealing member (27) of Fluck et al. toward the tapered face of the nozzle of Mullins, since it has been held that rearranging parts of an invention involves only routine skill in the art (*In re Japikse*, 86 USPQ 70) and merely turning the sealing member of Fluck et al. upside down in another direction performs the same function of sealing between two surfaces to ensure air tightness is maintained within the nozzle so that foreign material does not enter into refrigeration system.

Claims 17, 18, 19 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mullins (US 3,336,936) in view of Fluck et al. (US PG PUB 2004/0036232) and further in view of Gfoll (US 2,903,888).

Regarding Claims 17, 18, 19 and 20, Mullins (US 3,336,936) in view of Fluck et al. (US PG PUB 2004/0036232) as taught and described above fails to teach a generally cylindrical cover is fitted with an outer periphery of the cap so as to surround the sealing member arrangement where the cylindrical cover is made of a transparent material resin.

However, Gfoll (US 2,903,888) teaches that it is known in the art to have a generally cylindrical cover (1) that is fitted with an outer periphery of a cap (Column 1, Lines 63-65; top of 1 in Figure 1) that is made of a transparent resin (see Column 1, Lines 63-65 where transparent plastic is a resin). It would have been obvious to one having ordinary skill in that art at the time the present invention was made to provide the cap and sealing arrangement of Mullins in view of Fluck et al. with the generally cylindrical transparent resin cover of Gfoll, in order to provide for a manner in which a user can determine if the sealing arrangement of the nozzle cap is securely engaged with the nozzle which allows a user to prepare another refrigerant storage canister for charging operations into a refrigerant system assured that the nozzle valve is seated properly and that previously deposited refrigerant does not flow back out of the nozzle cap opening toward the sealing arrangement of the cap where the user would be able to view pressure bubbles present near the sealing arrangement of the cap and nozzle through the generally cylindrical transparent resin cover.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Childs et al. (US 3,232,097).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the

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shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Trevor McGraw whose telephone number is (571) 272-7375. The examiner can normally be reached on Monday-Friday (2nd & 4th Friday Off).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kevin Shaver can be reached on (571) 272-4720. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Trevor McGraw
Art Unit 3752

TEM

KEVIN SHAVER
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